

AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS

1. (Previously Presented) A computer-implemented method of generating a graphical portion of a graphical user interface (GUI), the method including computer-implemented steps comprising:

illustrating, in the same graphical portion, a tree hierarchy and a table of values;

including, in the tree hierarchy, one or more nodes belonging to a first node-category and one or more nodes belonging to a second node-category and corresponding to a group of elements;

adaptively arranging the table, in response to a selection of one of the first-category nodes via the GUI, to include one or more rows that present information about the one or more second-category nodes, respectively, and that report to the selected one of the first-category nodes, and two or more columns representing parameters of the one or more second-category nodes, respectively; and

showing, in the rows, sums of individual values exhibited by elements of the group, respectively.

2. (Original) The method of claim 1, the method further comprising: including, in the tree hierarchy, at least one node belonging to a third node-category; wherein the one or more first-category nodes report to the at-least-one third-category node, respectively.

3. (Previously Presented) The method of claim 1, wherein: the elements in the tree hierarchy represent a component in a storage domain.

4. (Previously Presented) The method of claim 3, wherein at least one instance of the parameter of the storage-domain component includes at least one of the following: a number of LUNs to which the element has access; an amount of storage space made available to the element; or a cost per unit time of an amount of storage made available to the element.

5. (Original) The method of claim 4, wherein: one of the one-or-more columns represents the storage-space-amount parameter; the at-least-one row associated via the at-least-one second-category node with the respective group of elements shows in a cell intersecting the storage-space-amount-parameter column a sum of the storage space represented by the elements of the group.

6. (Original) The method of claim 1, further comprising: splitting the graphical portion into a first pane and a second pane; the first pane containing the tree hierarchy; and the second pane containing the table.

7. (Original) The method of claim 1, wherein: the rows of the table are a first type of row; and the method further comprises including in the table a second type of row that presents information about the selected one of the first-category nodes.

8. (Original) The method of claim 7, wherein: the second-type row has a cell corresponding to each of the one or more columns, respectively; and the method further comprises showing, for each of the one-or-more cells of the second-type row, a sum of the values in the corresponding cells of the first-type rows.

9. (Original) The method of claim 1, further comprising: illustrating a title for the table, the title being an at least partial pathname to the selected one of the first-category nodes, the pathname including at least an identifier of a third level node to which the selected one of the first-category nodes reports.

10. (Original) The method of claim 1, further comprising: including, in the tree hierarchy, a node belonging to a third node-category, the first-category nodes reporting to the third-category node; wherein the tree hierarchy concerns various-type components of a storage domain, the third-category node represents the total instances of a particular type among the storage-domain components, and each of the second-category nodes represents a subset of the total instances of the particular type of storage-domain component.

11. (Original) The method of claim 1, wherein the table is formed of multiple tabbed subtables.

12. (Previously Presented) A method of generating a graphical portion of a graphical user interface (GUI), the graphical portion concerning various components of a storage domain, the method comprising:

illustrating a tree hierarchy; including, in the tree hierarchy, at least two nodes belonging to a first node-category, the first-category node representing the total instances of a particular type among the storage-domain components, the at least two nodes representing at least two different ones from among the following types of storage domain components including a storage area network (SAN), an interconnect device, a storage device, a host, or a business application; and

including, in the tree hierarchy, one or more subset nodes belonging to a second node-category reporting to the first-category node, each second-category subset node representing a subset of the total instances of the particular type of storage-domain component.

13. (Cancel)

14. (Original) The method of claim 12, further comprising: illustrating, in the tree hierarchy, one or more instance nodes belonging to the second node-category that reports to the first-category node, each second-category instance node representing a particular instance among the total instances of the particular type of storage-domain component.

15. (Original) The method of claim 12, further comprising: illustrating, in the tree hierarchy, one or more instance nodes belonging to a third node-category reporting to the second-category subset nodes, respectively, each third-category instance node representing a particular instance among the subset of instances of the corresponding second-category subset node.

16. (Original) The method of claim 12, further comprising: illustrating, in the tree hierarchy, a node a third node-category corresponding to the storage-domain as a whole, each first-category node reporting to the third-category node.

17. (Previously Presented) A machine-readable medium including instructions execution of which by a host produces a graphical portion of a graphical user interface (GUI), the machine-readable instructions comprising:

a code segment for illustrating, in the same graphical portion, a tree hierarchy and a table of values;

a code segment for including, in the tree hierarchy, one or more nodes belonging to a first node-category and one or more nodes belonging to a second node-category and corresponding to a group of elements;

a code segment for adaptively arranging the table, in response to a selection of one of the first-category nodes via the GUI, to include one or more rows that present information about the one or more second-category nodes, respectively, and that report to the selected one of the first-category nodes, and two or more columns representing parameters of the one or more second-category nodes, respectively; and

a code segment for showing, in the rows, sums of individual values exhibited by elements of the group, respectively.

18. (Original) The machine-readable instructions of claim 17, the machine-readable instructions further comprising: a code segment for including, in the tree hierarchy, at least one node belonging to a third node-category; wherein the one or more first-category nodes report to the at-least-one third-category node, respectively.

19. (Previously Presented) The machine-readable instructions of claim 17, wherein: the elements in the tree hierarchy represent a component in a storage domain.

20. (Previously Presented) The machine-readable instructions of claim 19, wherein at least one instance of the parameter of the storage-domain component includes at least one of the following: a number of LUNs to which the element has access; an amount of storage space made available to the element; or a cost per unit time of an amount of storage made available to the element.

21. (Original) The machine-readable instructions of claim 20, wherein: one of the one-or-more columns represents the storage-space-amount parameter; the at-least-one row associated via the at-least-one second-category node with the respective group of elements shows in a cell intersecting the storage-space-amount-parameter column a sum of the storage space represented by the elements of the group.

22. (Original) The machine-readable instructions of claim 17, further comprising: a code segment for splitting the graphical portion into a first pane and a second pane; the first pane containing the tree hierarchy; and the second pane containing the table.

23. (Original) The machine-readable instructions of claim 17, wherein: the rows of the table are a first type of row; and the machine-readable instructions further comprise a code segment for including in the table a second type of row that presents information about the selected one of the first-category nodes.

24. (Original) The machine-readable instructions of claim 23, wherein: the second-type row has a cell corresponding to each of the one or more columns, respectively; and the machine-readable instructions further comprise a code segment for showing, for each of the one-or-more cells of the second-type row, a sum of the values in the corresponding cells of the first-type rows.

25. (Original) The machine-readable instructions of claim 17, further comprising: a code segment for illustrating a title for the table, the title being an at least partial pathname to the selected one of the first-category nodes, the pathname including at least an identifier of a third level node to which the selected one of the first-category nodes reports.

26. (Original) The machine-readable instructions of claim 17, further comprising: a code segment for including, in the tree hierarchy, a node belonging to a third node-category, the first-category nodes reporting to the third-category node; wherein the tree hierarchy concerns various-type components of a storage domain, the third-category node represents the total instances of a particular type among the storage-domain components, and each of the second-category nodes represents a subset of the total instances of the particular type of storage-domain component.

27. (Original) The machine-readable instructions of claim 17, wherein the table is formed of multiple tabbed subtables.

28. (Previously Presented) A machine-readable medium including instructions execution of which by a host produces a graphical portion of a graphical user interface (GUI), the graphical portion concerning various components of a storage domain, the machine-readable instructions comprising:

- a code segment for illustrating a tree hierarchy;

- a code segment for including, in the tree hierarchy, at least two nodes belonging to a first node-category, the first-category node representing the total instances of a particular type among the storage-domain components, the at least two nodes representing at least two different ones from among the following types of storage domain components including a storage area network (SAN), an interconnect device, a storage device, a host, or a business application; and

a code segment for including, in the tree hierarchy, one or more subset nodes belonging to a second node-category reporting to the first-category node, each second-category subset node representing a subset of the total instances of the particular type of storage-domain component.

29. (Cancel)

30. (Original) The machine-readable instructions of claim 28, further comprising: a code segment for illustrating, in the tree hierarchy, one or more instance nodes belonging to the second node-category that reports to the first-category node, each second-category instance node representing a particular instance among the total instances of the particular type of storage-domain component.

31. (Original) The machine-readable instructions of claim 28, further comprising: a code segment for illustrating, in the tree hierarchy, one or more instance nodes belonging to a third node-category reporting to the second-category subset nodes, respectively, each third-category instance node representing a particular instance among the subset of instances of the corresponding second-category subset node.

32. (Original) The machine-readable instructions of claim 28, further comprising: a code segment for illustrating, in the tree hierarchy, a node a third node-

category corresponding to the storage-domain as a whole, each first-category node reporting to the third-category node.

33. (Previously Presented) An apparatus for managing components of a system, the apparatus comprising:

a host operatively connected to the components of system;

manager means for running on the host and for managing the components of the system in part by producing a graphical user interface (GUI); and

generation means for generating a graphical portion of the GUI, the generation means being operable to do at least the following

portray, in the same graphical portion, a tree hierarchy and a table of values,

portray, in the tree hierarchy, one or more nodes belonging to a first node-category and one or more nodes belonging to a second node-category and corresponding to a group of elements,

adaptively dispose the table, in response to a selection of one of the first-category nodes via the GUI,

include one or more rows that present information about the one or more second-category nodes, respectively, and that report to the selected one of the first-category nodes, and two or more columns representing parameters of the one or more the second-category nodes, respectively; and

portray, in the rows, sums of individual values exhibited by elements of the group, respectively.

34. (Previously Presented) The apparatus of claim 33, wherein: the system is a storage domain and the elements in the tree hierarchy represent a component in a storage domain.

35. (Original) The apparatus of claim 34, wherein a parameter of the storage-domain component includes one of the following: a number of LUNs to which the element has access; an amount of storage space made available to the element; and a cost per unit time of an amount of storage made available to the element.

36. (Original) The apparatus of claim 35, wherein: one of the one-or-more columns represents the storage-space-amount parameter; and the at-least-one row associated via the at-least-one second-category node with the respective group of elements shows in a cell intersecting the storage-space-amount-parameter column a sum of the storage space represented by the elements of the group.

37. (Original) The apparatus of claim 33, wherein: the rows of the table are a first type of row; and the generation means is further operable to dispose, in the table, a second type of row that presents information about the selected one of the first-category nodes.

38. (Original) The apparatus of claim 37, wherein: the second-type row has a cell corresponding to each of the one or more columns, respectively; and the generation

means is further operable to dispose, for each of the one-or-more cells of the second-type row, a sum of the values in the corresponding cells of the first-type rows.

39. (Previously Presented) An apparatus for managing components of a storage domain, the apparatus comprising:

a host operatively connected to the components of the storage domain;

storage area manager (SAM) means for running on the host and for managing the components of the storage domain in part by producing a graphical user interface (GUI); and

generation means for generating a graphical portion of the GUI, the graphical portion concerning various components of a storage domain, the generation means being operable to at least to do the following,

portray a tree hierarchy; portray, in the tree hierarchy, at least two nodes belonging to a first node-category, the first-category node representing the total instances of a particular type among the storage-domain components, the at least two nodes representing at least two different ones from among the following types of storage domain components including a storage area network (SAN), an interconnect device, a storage device, a host, or a business application, and

portray, in the tree hierarchy, one or more subset nodes belonging to a second node-category reporting to the first-category node, each second-category subset node representing a subset of the total instances of the particular type of storage-domain component.

40. (Cancel)

41. (Original) The apparatus of claim 39, wherein the generation means is further operable to dispose, in the tree hierarchy, one or more instance nodes belonging to the second node-category that reports to the first-category node, each second-category instance node representing a particular instance among the total instances of the particular type of storage-domain component.

42. (Original) The apparatus of claim 39, wherein the generation means is further operable to dispose one or more instance nodes belonging to a third node-category reporting to the second-category subset nodes, respectively, each third-category instance node representing a particular instance among the subset of instances of the corresponding second-category subset node.

43. (Original) The apparatus of claim 39, wherein the generation means is further operable to dispose a node a third node-category corresponding to the storage-domain as a whole, each first-category node reporting to the third-category node.

44. (Previously Presented) A method of generating a graphical portion of a graphical user interface (GUI), the method comprising:

illustrating, in the same graphical portion, a tree hierarchy and a constellation of values;

including, in the tree hierarchy, one or more nodes belonging to a first node-category and one or more nodes belonging to a second node-category and corresponding to a group of elements;

adaptively arranging the constellation, in response to a selection of one of the first-category nodes via the GUI, to include regions that present information about the one or more second-category nodes, respectively, and that report to the selected one of the first-category nodes, and the regions being organized in terms of two or more parameters of the one-or-more of the second-category nodes, respectively; and

showing, in the regions, sums of individual values exhibited by elements of the group, respectively.

45. (Original) The method of claim 44, wherein the regions define the constellation as a table in which: one or more rows present information about the one or more second-category nodes, respectively, that report to the selected one of the first-category nodes; and the one or more parameters are represented via one or more columns, respectively; and the sums of individual values for the one or more parameters exhibited by elements of the group, respectively, are shown in the rows.